

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

# REGION 4 ATLANTA FEDERAL CENTER 61 FORSYTH STREET S.W ATLANTA, GEORGIA 30303-8960

# **SENT VIA ELECTRONIC MAIL**

Mr. Alan Gillespie Regional Environmental Manager Commercial Metals Company 16770 Rebar Road Baldwin, Florida 32234 James.gillespie@cmc.com

Dear Mr. Gillespie:

Enclosed is a copy of the final report generated by the U.S. Environmental Protection Agency's Region 4, South Air Enforcement Section, for the inspection conducted at the Commercial Metals Company (CMC Recycling) facility, located in Baldwin, Florida, on July 21, 2021.

If you have any questions, you can contact me at (404) 562-9134, or by email at taylor.kevin@epa.gov.

Sincerely,

Kevin Taylor Environmental Engineer South Air Enforcement Section

Enclosure

# ENCLOSURE FINAL INSPECTION REPORT

# United States Environmental Protection Agency (EPA) Region 4 Air Enforcement Branch Draft Inspection Report

#### I. GENERAL INFORMATION

Facility Name: CMC Steel US, LLC

Location (Address): 16770 Rebar Road, Baldwin, Florida 32234

**Inspection Date:** July 21, 2021

#### **Type of Inspection (Full or Partial Compliance Evaluation):**

Partial Compliance Evaluation

ICIS-Air Number: FL0000001203100157

#### **EPA Region 4 Investigator(s)/Inspector(s):**

- 1. Kevin Taylor, Environmental Engineer
- 2. Sydnee Adams, Environmental Engineer
- 3. Bethany Terpin, Environmental Scientist

# **State/Local Investigator(s)/Inspector(s):**

1. Stuart Bartlett, Environmental Consultant, Florida Department of Environmental Protection

#### **Person(s) Contacted at Facility (Name and Title):**

- 1. Alan Gillespie, Regional Environmental Manager
- 2. Brad Bredeson, Director of Environment
- 3. Peter Pozzo, Area Environmental Manager
- 4. Abe Boackle, Area Operations Manager
- 5. Doug Caswell, Plant Manager
- 6. Kyle Barone, Environmental Specialist
- 7. Anthony Cinelli, Environmental Manager

**Report Prepared by:** Kevin Taylor

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## II. FACILITY INFORMATION

## A. Facility and Permit Information

J	Facility and Permit Information	Comments
1.	Type of facility (e.g., chemical plant, refinery, cement manufacturer, etc.).	Recyclable Material Merchant Wholesalers; Automobile and Scrap Metal Shredding
2.	Air permit number(s) and type of permit (e.g., Title V, PSD, Synthetic Minor, etc.).	Title V permit # 0310157-016-AV
3.	Air permit issuance date.	02/11/2020
4.	Air permit expiration date.	04/02/2024
5.	Facility classification (Major, Synthetic Minor/Conditional Major, Minor).	Major Source
6.	Major source pollutants (if applicable).	N/A
7.	Applicable regulations (e.g., State Implementation Plan, MACT Subpart FFFF, NSPS Subpart EEEE, etc.).	State Implementation Plan 40 CFR Part 82
8.	·	Metal Shredder Hammer Mill
9.	Types of air pollution control equipment (e.g., baghouse, scrubber, afterburner, etc.).	Water spraying at the hammer mill is used for fire prevention, but also reduces particulate matter.

## **B.** Process Description

Commercial Metals Company (CMC), Inc. owns and operates a scrap metal recycling facility in Baldwin, Florida. The facility purchases scrap metal materials, including automobiles and white goods, from contracted industrial dealers. After purchase, metal scrap is sorted and prepared for recycling at the facility to be sent to the facility's metal shredder operation. The facility operates a 6,000 horsepower Shredder Company metal

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shredder that contains a rotor that is 98" wide and about 104-108" tall. The metal shredder has a maximum processing rate of approximately 200 tons of scrap per hour. However, it has been proposed in a draft FDEP permit to limit the metal shredder production rate to 168 tons of scrap per hour. The metal shredder is equipped with a water spraying system to minimize heat and prevent fires. Scrap that has been shredded through the metal shredder is separated by downstream processing into ferrous, nonferrous, and automotive shredder residue (ASR). After the metal scrap has been processed it is recycled at the adjacent steel mill.

#### III. INSPECTION ACTIVITIES

	Activity	Yes No NA	Comments
	Opening Meeting		
1.	Date and time entered the facility.	Y	EPA Region 4 (R4) inspectors arrived at the facility on July 21, 2021 at 1:45 PM EDT.
2.	Credentials presented to facility personnel (include name and title).	Y	All inspectors presented their credentials to Alan Gillespie, Regional Environmental Manager.
3.	Conducted an opening meeting to explain the purpose and objectives of the inspection.	Y	Inspectors held an opening meeting during which the purpose and objectives of the inspection were explained.
4.	Discussed safety issues.	Y	Inspectors discussed facility-specific safety and emergency procedures, including procedures for COVID-19 safety during the inspection.

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<sup>&</sup>lt;sup>1</sup> Following the inspection, on October 6, 2021, the FDEP issued as final a Title V Air Operation Permit No. 0310157-018-AV, on September 21, 2021. The final permit authorizes operation of the Scrap Metal and Automobile Shredder, Emissions Unit 018, at the Baldwin facility. Specific Condition F.1. of the final Title V defines the permitted capacity as a maximum process rate of the shredder not to exceed 168 tons per hour.

	Activity	Yes	Comments
		No NA	
5.	Discussed which records to be reviewed.	Y	Review of facility records was discussed. Due to the EPA Covid 19 protocol, the EPA Region 4 inspectors did not review records at the facility at the time of the inspection. However, the facility personnel volunteered to send, via email, the following additional information:
6.	Discussed the facility walk- through and the areas to be	Y	source control letter.  Inspectors were primarily interested in observing the metal shredder operation and
	observed in the facility.		scrap inspection procedures.
7.	Discussed facility policy regarding photographs or video (if applicable).	Y	Region 4 inspectors discussed facility policy regarding photography and videography. EPA inspectors brought a digital camera to take pictures of the facility and invited facility staff to duplicate pictures during the walk-through. Inspectors indicated that copies of any videos or photographs taken at the facility would be sent to the company.
8.	Discussed the use of the infrared camera, TVA, PID, and any other equipment.	Y	Region 4 inspectors communicated the use of the digital camera.
9.	Discussed CBI.	Y	EPA inspectors indicated that any material claimed to be Confidential Business Information (CBI) would be treated in accordance with regulations.

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Activity	Yes	Comments
	No	
	NA	
<b>Records Reviewed at the Facility</b>		
10. The types of records reviewed,	Y	The following records were requested to be
and the time period reviewed.		sent to R4 inspectors via email:
		<ul> <li>Commercial Supplier Contracts</li> </ul>
		<ul> <li>Production data from 2018 to the</li> </ul>
		present, including input and
		output rates and types of scrap processed.
		<ul> <li>Maximum throughput of tons of scrap shredded per month</li> </ul>
		ASR test results
		<ul> <li>Explosion logs with associated source control letter.</li> </ul>
		R4 Inspectors ask for these records from
		2018 to the present.
Facility Walk-Through		
Observations		

11. The process equipment observed and the associated operational rate observed (e.g., Furnace 1 production rate was 5 lbs/hr on 1/1/15, at 2:00 pm – permit requires max rate at 6 lbs/hr).

Y

Provide the date and time the information was recorded by the inspector.

Identify the permit limit (if applicable).

An attachment may be used for a large amount of information.

EPA Region 4 inspectors conducted an inspection of process areas, including the metal shredder operations, scrap inspection process, and scrap intake area.

CMC purchases scrap from suppliers and requires the suppliers of scrap that might contain regulated refrigerants to execute an agreement to remove refrigerants from the scrap prior to delivery.

Once scrap is received at the facility it is inspected by a dedicated scrap inspector prior to recycling. Scrap inspectors visually inspect the load of scrap for possible quality downgrades and to ensure that prohibited and/or objectionable items are not present. There may be acceptable materials requiring an extra step to size the material appropriately for the shredder.

The facility operates a 6,000 horsepower Shredder Company metal shredder that contains a rotor that is 98" wide and about 104-108" tall. The metal shredder has a maximum processing rate of approximately 200 tons of scrap per hour. However, it has been proposed in a draft FDEP permit to limit the metal shredder production rate to 168 tons of scrap per hour.<sup>2</sup> The metal shredder is equipped with a water spraying system to minimize heat and prevent fires. Scrap that has been shredded through the metal shredder is separated by downstream processing into ferrous materials, nonferrous materials, and automotive shredder residue (ASR). For a typical month the average purchase volume is between 14,000 to 18,000 tons per month, with product produced of 11,000 to 14,000 tons.

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Activity	Yes No NA	Comments
12. The type of process parametric monitoring observed and the associated value observed (e.g., Furnace 1 flux injection rate was 200 lbs/batch at 1/1/15, at 2:00 pm – permit requires max rate at 225 lbs/batch).	N/A	
Provide the date and time the information was recorded by the inspector.		
Identify the permit limit (if applicable).		
An attachment may be used for a large amount of information.		
13. If process equipment or parametric monitoring equipment was not operating, state the reason by facility personnel why the equipment was not operating.	N/A	

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<sup>&</sup>lt;sup>2</sup> Following the inspection, on October 6, 2021, the FDEP issued as final a Title V Air Operation Permit No. 0310157-018-AV, on September 21, 2021. The final permit authorizes operation of the Scrap Metal and Automobile Shredder, Emissions Unit 018, at the Baldwin facility. Specific Condition F.1. of the final Title V defines the permitted capacity as a maximum process rate of the shredder not to exceed 168 tons per hour.

Activity	Yes No NA	Comments
14. The type of air pollution control equipment, the process equipment it is controlling, and the associated parametric monitoring value observed (e.g., baghouse pressure drop, temperature, scrubber flow rate, etc.).  (For example - RTO 1 controlling furnace 1, 1,500 degrees F on 1/1/15, at 2:00 pm – permit requires 1,400 degree F or higher).  Provide the date and time the information was recorded by the inspector.  Identify the permit limit (if applicable).  An attachment may be used for	Y	The facility operates a water spraying system at the shredder. The primary function is heat reduction, but it is also used to reduce particulate matter emissions. Water is released at a variable rate, depending on the motor speed of the hammer mill.
a large amount of information.		

Activity	Yes No NA	Comments
15. Continuous emissions monitoring devices and values observed. (e.g., CEMS, COMs, etc.).	N/A	
Provide the date and time the information was recorded by the inspector.		
Identify the permit limit (if applicable).		
An attachment may be used for a large amount of information.		
16. If air pollution control equipment was not operating, state the reason by facility personnel why the equipment was not operating.	N/A	
17. Capture and collection system (enclosures and hoods) observations, if applicable (e.g., the magnitude and duration of emission escaping capture from the hood).	N/A	

Activity	Yes No NA	Comments
18. Ductwork transferring the emissions to the air pollution control device observations, if applicable (e.g., the magnitude and duration of emission escaping from the ductwork, holes or deterioration in ductwork, no deterioration observed, etc.).	N/A	
19. Any existing unpermitted emission points, new unpermitted emission points, or non-permitted construction activities observed. (if yes, describe in the comments field).	Y	The facility's current permit does not specifically address VOC emissions from the metal shredder. However, following the inspection CMC clarified that the current permit is based upon estimated emissions from the shredder as estimated and understood at the time the permit was issued. At that time, the shredder met the qualifications of an insignificant emissions unit or pollutant-emitting activity per Rule 62-213.430(6), F.A.C., and FDEP permitted the shredder as an Insignificant Activity in Appendix I of Title V Air Operation Permit No. 0310157-016-AV. More recently, FDEP has authorized continued operation of the Shredder (as Emissions Unit 018), based on the current emission factors used for potential VOC emissions, per final Title V Air Operation Permit No. 0310157-018-AV, issued on September 21, 2021.
20. Were any visible emissions observed? (if yes, identify the location and equipment).	N	•

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Activity	Yes No NA	Comments
21. Was a Method 9 reading performed? (if yes, identify the location and equipment).	N	
22. Was the cause of the visible emissions investigated and the information documented?	N/A	
23. Was a Method 22 performed for visible emissions? (if yes, identify the location and equipment).	N	
24. Identify the cause of the visible emissions as explained by facility personnel, if applicable.	N/A	
25. Was the infrared camera used? If so, attach the video log (which includes the equipment ID, and the date and time the video was recorded) and videos to this report.	N	EPA R4 inspectors did not use an infrared camera at the facility but did use a digital camera to capture photographs of the facility. See Appendix A for the Photograph Log.

Activity	Yes No	Comments
26. Was the TVA used? If so, identify the equipment monitored and the results.  Provide the date and time the information was recorded by the inspector. Include actual instrument readings for each piece of equipment monitored above the leak definition and/or where the infrared camera identified a release.  An attachment may be used for a leave amount of information.	NA N	EPA R4 inspectors did not use a TVA at the facility.
a large amount of information.		
27. Was the PID used? If so, identify how the PID was used and the results.	N	EPA R4 inspectors did not use a PID at the facility.
Provide the date and time the information was recorded by the inspector.		
An attachment may be used for a large amount of information.		
Closing Meeting		
28. Conducted a closing meeting.	Y	EPA Region 4 inspectors conducted a closing meeting on July 21, 2021 at 2:45 PM EDT with CMC employees and the Florida Department of Environmental Protection inspector.

Activity	Yes	Comments
	No	
	NA	
29. Summarize any additional	Y	Due to the EPA Covid 19 protocol, the EPA
information needed, if		Region 4 inspectors did not review records
applicable?		at the facility at the time of the inspection.
		However, the facility personnel volunteered to send, via email, the following additional
		information:
		- Commercial Supplier Contracts
		- Production data from 2018 to the
		present, including input and output
		rates and types of scrap processed.
		- Maximum throughput of tons of
		scrap shredded per month.
		- ASR test results
		- Explosion logs with associated
		source control letter.
30. Accept a declaration of CBI, if	N/A	
applicable?		
31. Discussed observations.	Y	Inspectors thanked facility personnel for
		their time and summarized inspection
		activities. The company was informed of
		the EPA's potential concern for metal
		shredder VOC emissions. These potential concerns are being researched and analyzed
		nationwide using emission testing to
		determine if the current emission factors are
		reasonable or if they should be modified.
32. Discussed next steps, if	Y	A final inspection report from EPA Region
applicable?		4 will be sent to the company within a 60-
		day timeframe. Document requests were
22 D		discussed.
33. Date and time inspection		The inspection concluded on July 21, 2021
concluded.		at approximately 3:20 PM EDT.
Miscellaneous		
34. Include any additional	N/A	
observations, if applicable.		

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EPA Investigator/Inspector Signature	<u> </u>
EPA Supervisor Signature & Title	
Date Report Finalized:	

# Appendix A: Inspection Video and Photograph log

Table 1: Photographs taken during the July 21, 2021, inspection.

Image	File Name	Date and Time (incl. time zone and	Description of Image
Number		DST)	
1	P1010417.JPG	7/21/2021 14:12 (EDT)	Signs at Scale for
			Acceptable Scrap
2	P1010418.JPG	7/21/2021 14:12 (EDT)	Signs at Scale for
			Acceptable Scrap
3	P1010419.JPG	7/21/2021 14:17 (EDT)	Sizing Operation
4	P1010420.JPG	7/21/2021 14:24 (EDT)	Shredder
5	P1010421.JPG	7/21/2021 14:30 (EDT)	Separation Operation
6	P1010422.JPG	7/21/2021 14:30 (EDT)	Separation Operation
7	P1010423.JPG	7/21/2021 14:35 (EDT)	Steel Shred